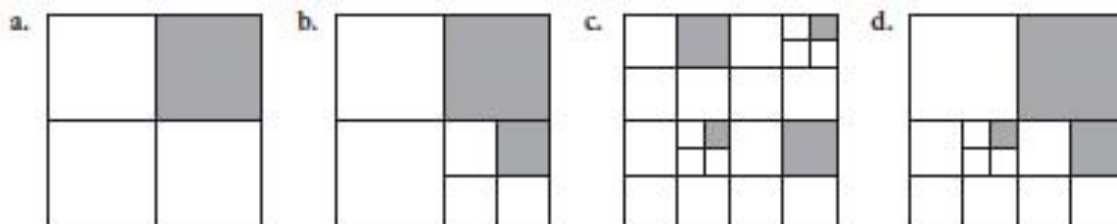


Lesson 0.1 • The Same yet Smaller

Name _____ Period _____ Date _____

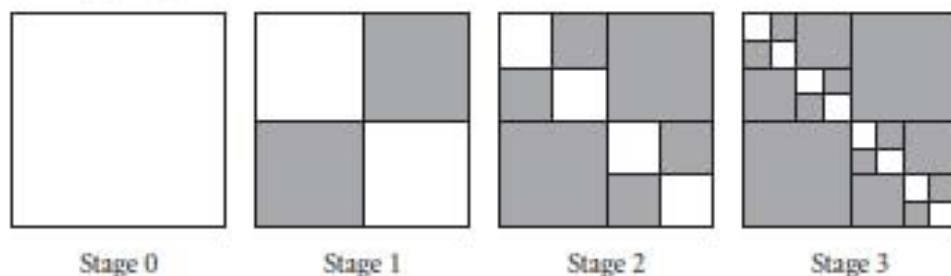
1. Write an expression and find the total shaded area in each square. In each case, assume that the area of the largest square is 1.



2. Write an expression and find the total shaded area in each triangle. In each case, assume that the area of the largest triangle is 81.



3. Use this fractal pattern to answer the questions. Assume that the area of the Stage 0 square is 1.



- a. Draw Stage 4 of the pattern.
- b. What is the area of the smallest square at Stage 4?
- c. What is the total area of the unshaded squares at Stage 2? At Stage 3?
4. Suppose the largest triangle in this figure has an area of 1.
- a. Write an expression for the shaded area.
- b. Write an expression for the unshaded area.
- c. Write an expression for the smallest triangle at the center.

